ENVIRONMENTAL CONSIDERATIONS

Grant of this application would not be considered a major action. The proposed operation does not fall within the categories outlined under Section 1.1307(a) of the FCC Rules as having a potentially significant environmental effect. The nearest designated critical habitat is that of the Morro Bay Kangaroo Rat. The proposed facility is over 15 kilometers away from the nearest boundary of this habitat and would therefore be unlikely to have any adverse effect upon it. Due to the proposed combining of the new FM station on the existing KCBX(FM) antenna, the construction has not been a source of local controversy to date and does not require FAA notification.

The proposed operation has been studied in accordance with the procedures set forth in FCC OST Bulletin No.65 (October 1985) and has been found to comply with the ANSI C95.1-1982 Standard. The radio frequency power density at 2 meters above ground level contributed by the proposed operation was calculated to be 13% of the ANSI limit. Maximum ground level power densities at the proposed site occurs with all authorized stations and the proposed addition of FM Station KDDB operating simultaneously at the site. This results in calculated power densities of only 34% of the composite ANSI limit at two meters above ground level throughout the site. Therefore, it is my opinion that the addition of the proposed Channel 207B transmitting facilities will not result in any exposure at ground level exceeding the ANSI limit. The applicant will perform field surveys to verify compliance with ANSI standards upon completion of the proposed construction and will institute any safety measures found necessary to achieve compliance.

The nearest FCC monitoring station given in Section 0.121 of the FCC Rules is 280 kilometers distant in Livermore, California. The calculated field strength at that distance is less than 0.001 mV/m and full compliance with Section 73.1030 is assured.

LIST OF FIGURES

In carrying out these engineering studies, the following attached figures were prepared by me or under my direct supervision:

1. Engineering specifications of the proposed operation
2. Map showing the proposed transmitter site
3. Elevation drawing of the proposed antenna system
4. Tabulation of terrain and coverage data for the proposed operation
5. Map showing proposed coverage
6. Maps showing allocation conditions

Appendix A Engineering Statement of Robert P. Smith, dated November 14, 1968

Appendix B Letter of concurrence from KSBY-TV, dated May 31, 1989.

HAMMETT & EDISON, INC.
Consulting Engineers

Leonard G. Filomeo, P.E.

June 8, 1989

AFFIDAVIT

State of California)
) ss:
County of San Mateo)

Leonard G. Filomeo, being first duly sworn upon oath, deposes and says:

1. That he is a qualified Registered Professional Engineer, holds California Registration No. E-010606 which expires June 30, 1989, and is employed in the firm of Hammett & Edison, Inc., Consulting Engineers, with offices located near the city of San Francisco, California,

2. That he graduated from the California Polytechnic State University, San Luis Obispo, California, with a Bachelor of Science degree in Electronics Engineering in 1975, has completed fourteen years of employment in communications systems engineering including Motorola Communications and Electronics, the Grass Valley Group, Alta Consulting Services, and the U.S. Army Television-Audio Support Activity, and has been associated with the firm of Hammett & Edison, Inc., since 1988,

3. That the firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by KCBX, Inc., to prepare the engineering portion of an application for construction permit to establish a new noncommerical educational FM station to operate with Class B facilities on 89.3 MHz, Channel 207B, at San Luis Obispo, California,

4. That such engineering work has been carried out by him or under his direction and that the results thereof are attached hereto and form a part of this affidavit, and

5. That the foregoing statement and the report regarding the aforementioned engineering work are true and correct of his own knowledge except such statements made therein on information and belief, and as to such statements, he believes them to be true.

Leonard G. Filomeo, P.E.

Subscribed and sworn to before me this 8th day of June, 1989

OFFICIAL SEAL
ERNEST B. MONTANER
NOTARY PUBLIC - CALIFORNIA
SAN MATEO COUNTY
My Comm. Expires June 3, 1991

NEW FM STATION
SAN LUIS OBISPO, CALIFORNIA

ENGINEERING SPECIFICATIONS OF PROPOSED OPERATION

A. Transmitter Site

North Latitude	35° 21' 37"
West Longitude	120° 39' 17"

Side-mounted on KSBY-TV tower, Cuesta Peak,
8.8 km north of San Luis Obispo, California

B. Equipment

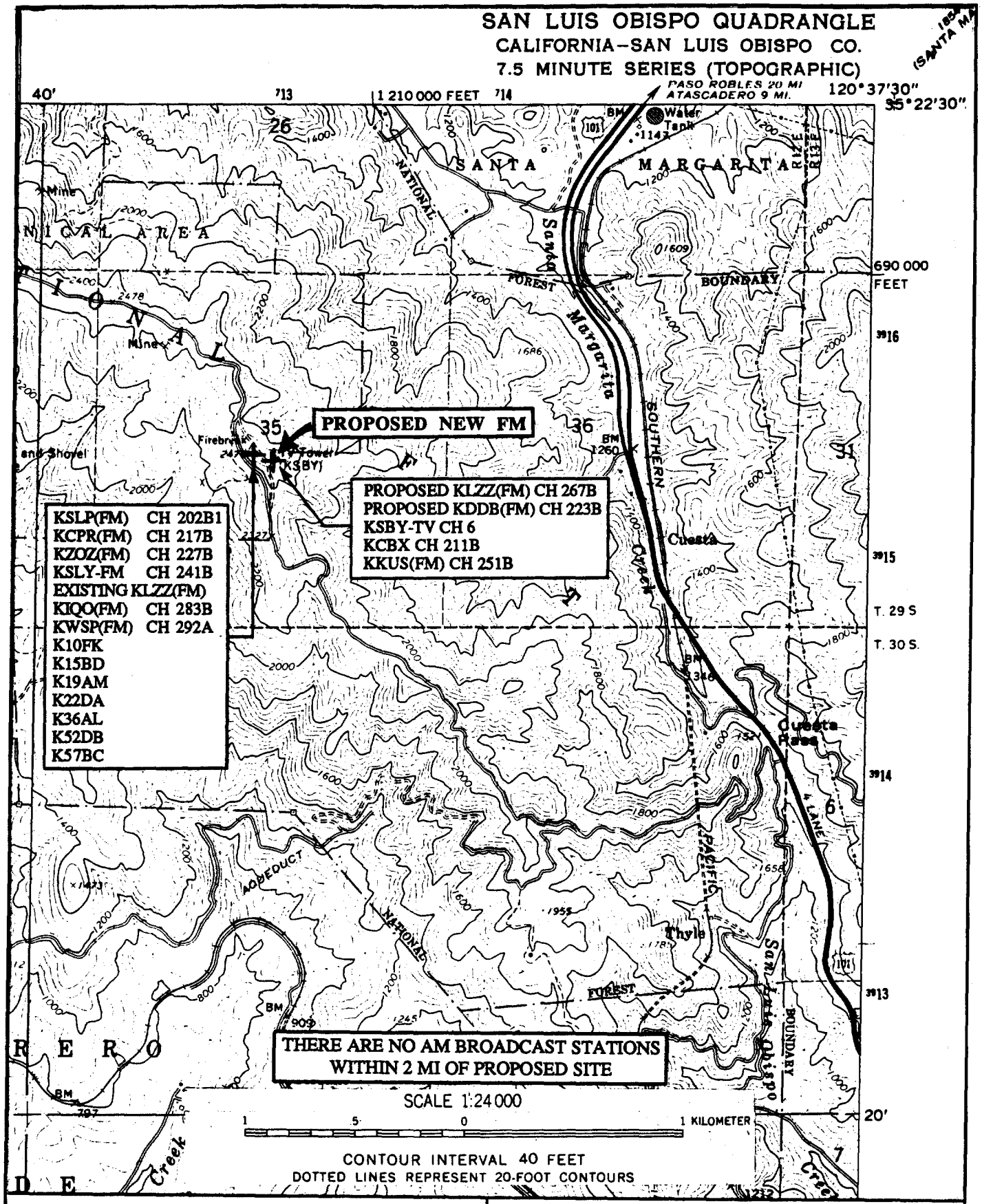
Transmitter	Harris, Type FM-3.5K	3.5 kW
Transmission line	Andrew, Type LDF5-50A, 7/8-inch foam-dielectric	30 m
Tower	Existing KSBY-TV guyed tower	140 m
Antenna	Jampro, Type JLCP-4	4-bay

C. Height

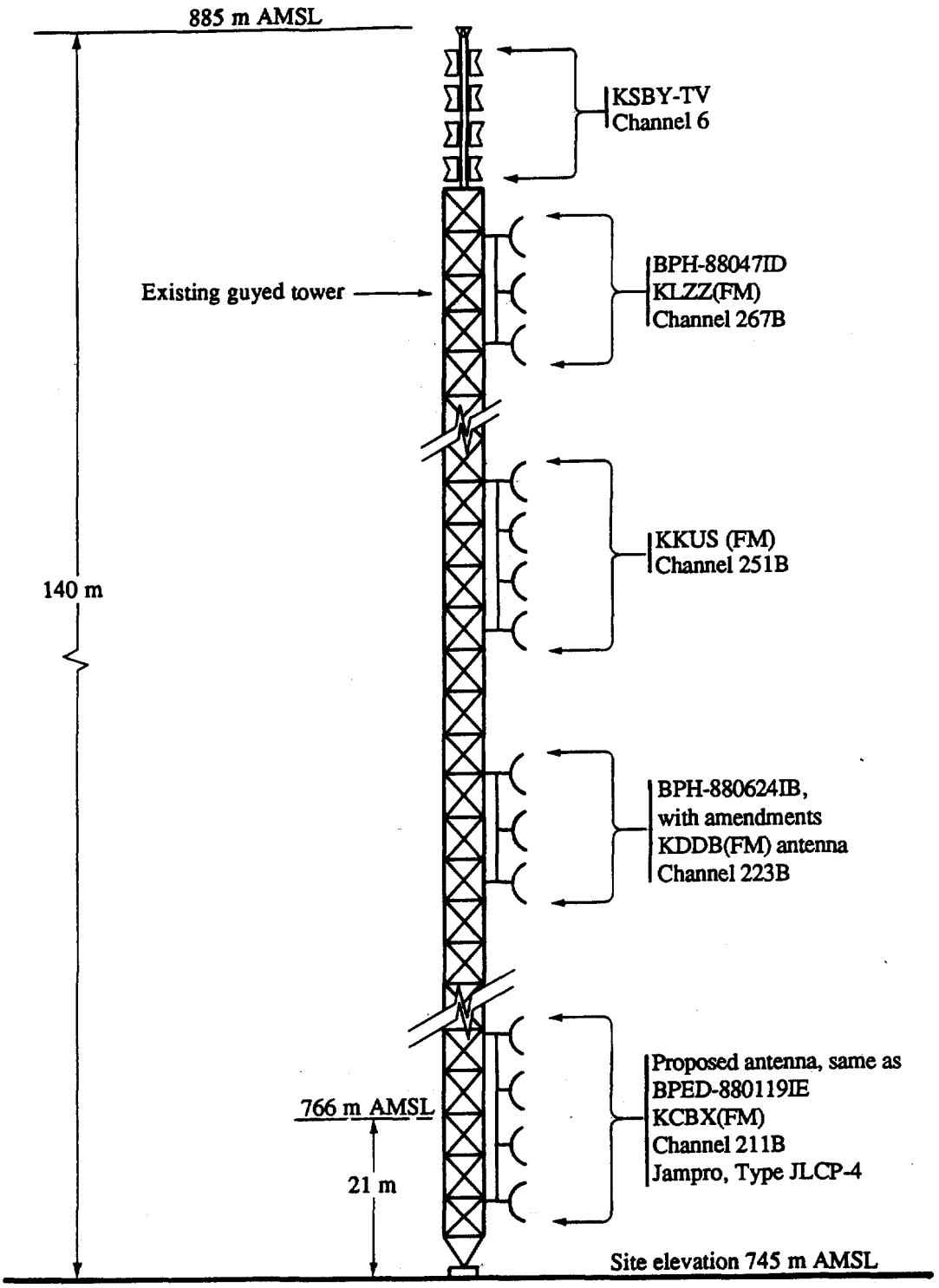
Height of site above mean sea level (existing)	745 m
Height of tower above site (existing)	140 m
Overall height above mean sea level (existing)	885 m
Height of average terrain above mean sea level	333 m
Height of site above average terrain	412 m
Effective height of antenna above site	21 m
Effective height of antenna above average terrain	433 m
Effective height of antenna above mean sea level	766 m

D. Operation

Frequency	89.3 MHz
Channel	207B
Transmitter output (FCC rounded)	3.2 kW
Transmission line and combiner efficiency	0.82
Antenna power gain, horizontal and vertical polarizations	2.05
Effective radiated power, horizontal and vertical polarizations	5.3 kW



HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN FRANCISCO	NEW FM STATION 89.3 MHZ, CHANNEL 207B SAN LUIS OBISPO, CALIFORNIA	**PROPOSED SITE** 890519 FIGURE 2



N. Lat. 35° 21' 37"
W. Long. 120° 39' 17"

NOT TO SCALE

PROPOSED ANTENNA ELEVATION

HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN FRANCISCO	NEW FM STATION 89.3 MHZ, CHANNEL 207B SAN LUIS OBISPO, CALIFORNIA

890519

FIGURE 3

NEW FM STATION
SAN LUIS OBISPO, CALIFORNIA

TERRAIN AND COVERAGE DATA
PROPOSED OPERATION

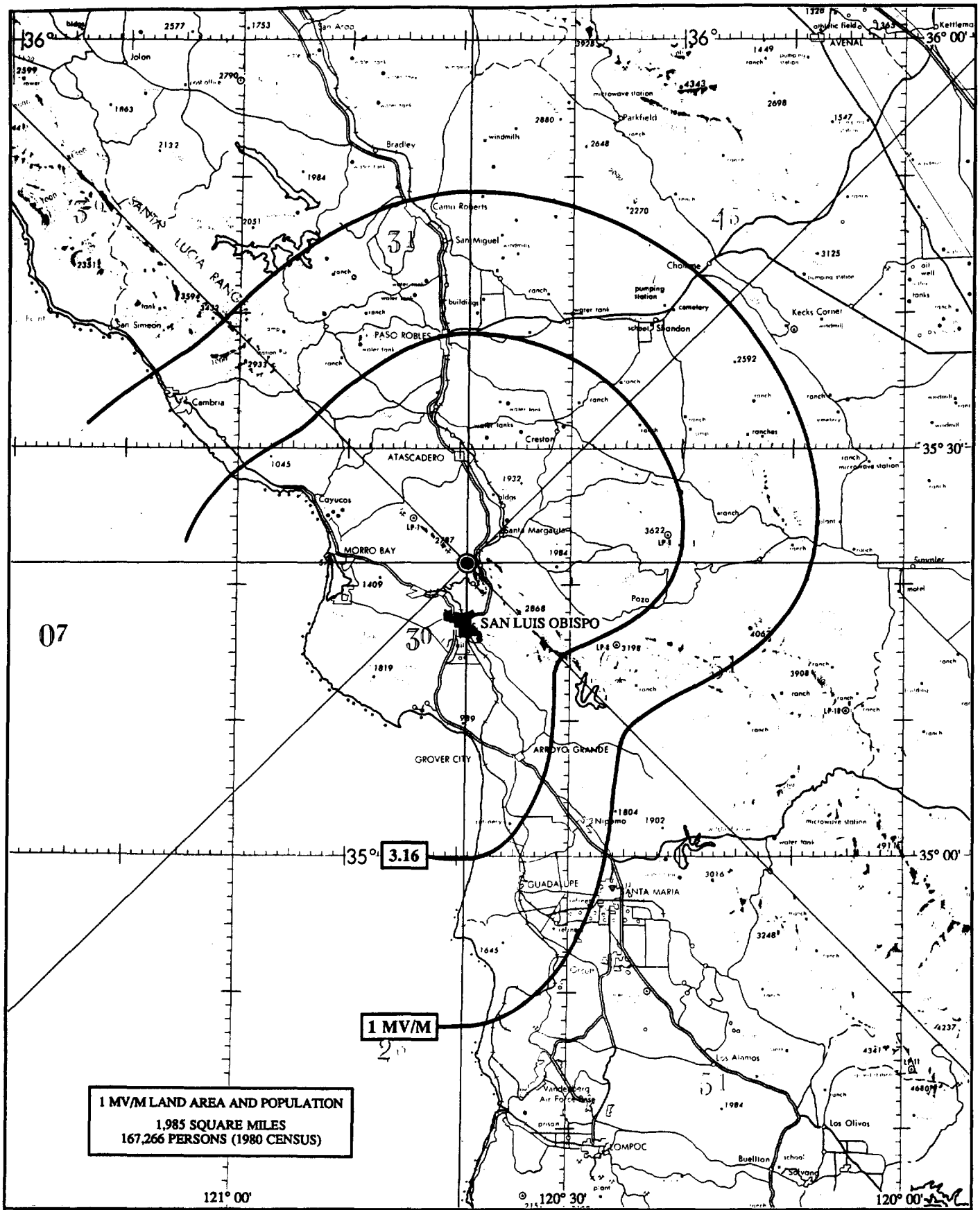
Azimuth	Average Elevation[1] (3 to 16 km)	Antenna Height Above Average Terrain[2]	Effective Radiated Power[3]	Distance to Contours[4] 3.16 mV/m	1 mV/m
N 0° E	366 m	400 m	5.3 kW	31.0 km	50.1 km
45	375	391	5.3	30.7	49.6
90	425	341	5.3	28.7	46.7
135	631	135	5.3	18.2	31.5
180	112	654	5.3	40.0	62.8
225	160	606	5.3	38.5	61.0
270	166	600	5.3	38.3	60.8
315	427	339	5.3	28.6	46.6
Average	333	433			

1 KSBY-TV file, see Appendix A attached

2 766 m effective antenna height minus average elevation

3 Class B maximum effective radiated power

4 FCC Rules, Section 73.333, Figure 1



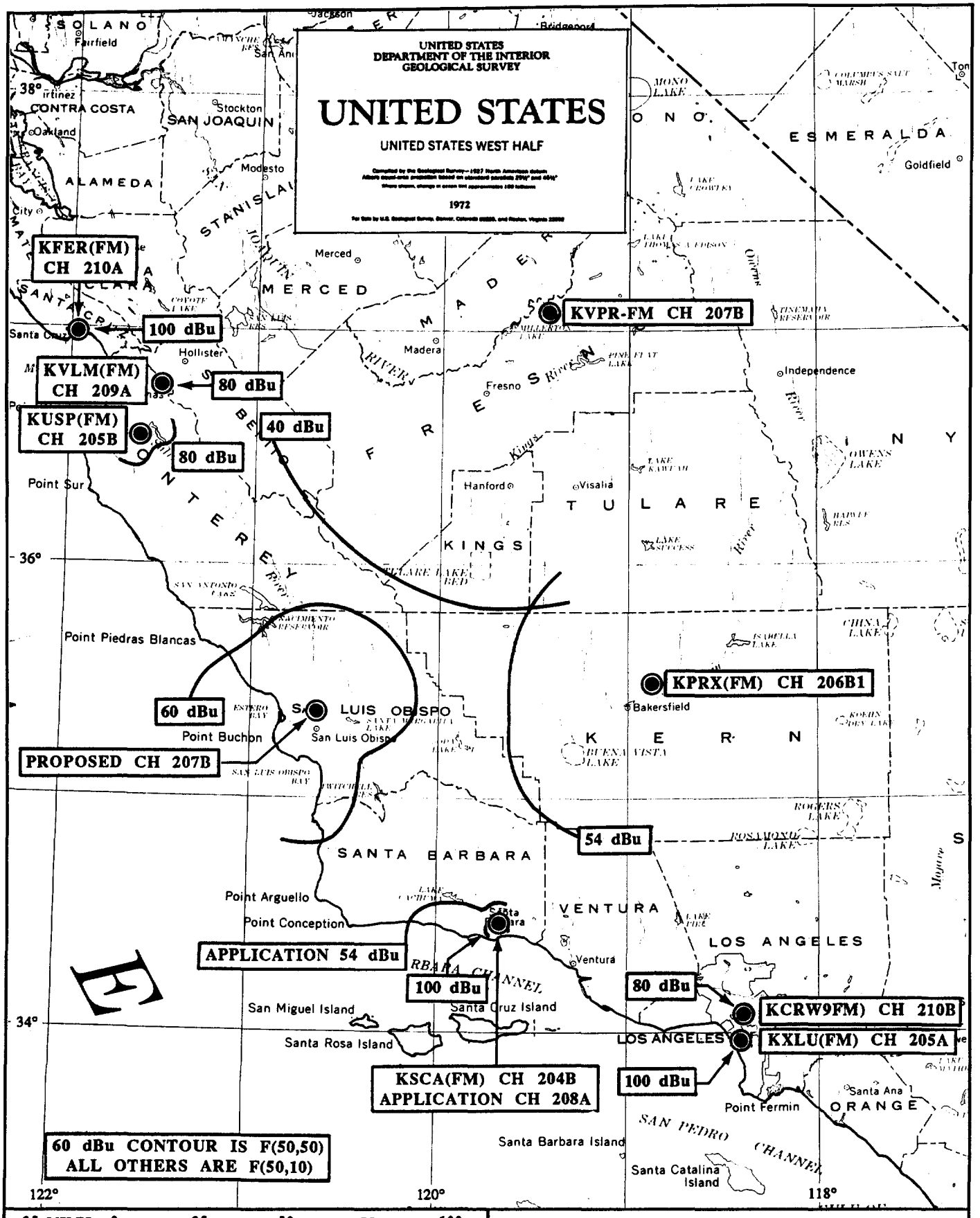
HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

NEW FM STATION
89.3 MHZ, CHANNEL 207B
SAN LUIS OBISPO, CALIFORNIA

CALCULATED CONTOURS
5.3 KW EFFECTIVE RADIATED POWER
433 M ABOVE AVERAGE TERRAIN

890519

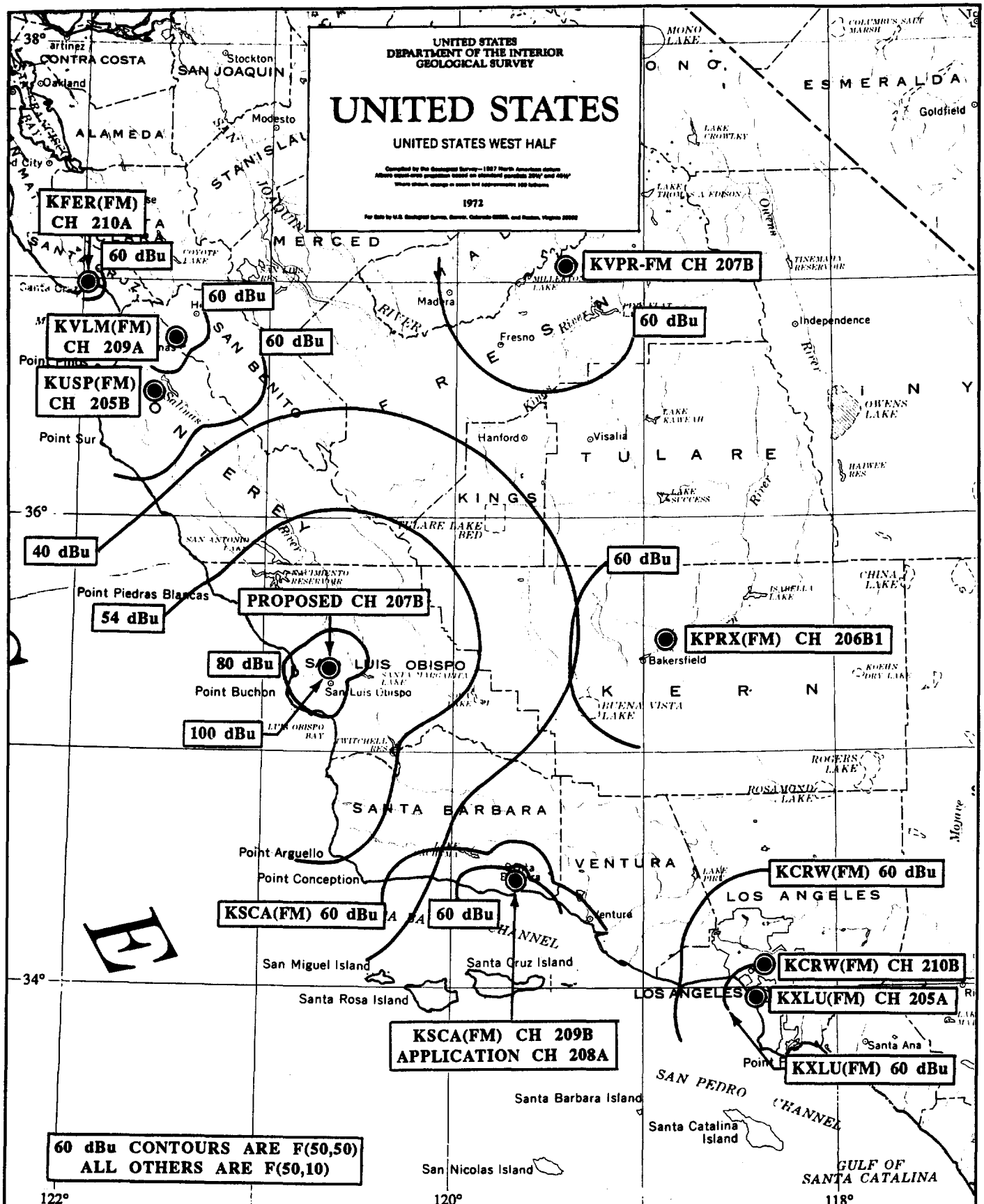
FIGURE 5



ALLOCATION CONDITIONS
PROPOSED CHANNEL 207B TOWARDS OTHER STATIONS

HAMMETT & EDISON, INC. CONSULTING ENGINEERS SAN FRANCISCO	NEW FM STATION 89.3 MHZ, CHANNEL 207B SAN LUIS OBISPO, CALIFORNIA	890519

FIGURE 6A



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

NEW FM STATION
89.3 MHZ, CHANNEL 207B
SAN LUIS OBISPO, CALIFORNIA

ALLOCATION CONDITIONS
OTHER STATIONS TOWARDS PROPOSED CHANNEL 207B

890519

FIGURE 6B

STATION KSBY-TV
SAN LUIS OBISPO, CALIFORNIA

ENGINEERING STATEMENT OF ROBERT P. SMITH

The firm of Hammett & Edison, Consulting Engineers, has been retained by Central California Communications Corporation, licensee of Station KSBY-TV, San Luis Obispo, California, to prepare engineering data relating to the correct location of Station KSBY-TV as recently determined by the U. S. Coast and Geodetic Survey.

The correct location of the transmitting facilities of Station KSBY-TV and co-located Station KSBY-FM is approximately 1600 feet west of the location shown in material previously filed with the Federal Communications Commission. The erroneous location of Station KSBY-TV was established by others several years ago. New terrain studies have been made. See this firm's engineering statement for Station KSBY-FM dated October 31, 1968. All data herein relate to the existing facilities of Station KSBY-TV which have been in use since 1961. The transmitter location remains unchanged from that constructed in 1961.

LIST OF FIGURES

The following attached figures have been prepared by me or under my direct supervision:

1. Engineering specifications as installed
2. Tabulation of terrain and coverage data
3. Map showing existing coverage.

HAMMETT & EDISON
Consulting Engineers

Robert P. Smith

Robert P. Smith

Subscribed and sworn to before me this 14th day of November, 1968

STATION KSBY-TV

ENGINEERING SPECIFICATIONS

A. Transmitter Site

North Latitude	35° 21' 37"
West Longitude	120° 39' 17.5" *

5.5 miles north of city limits of San Luis Obispo, California

B. Studio Site

Mountain View and Hill Streets, San Luis Obispo, California

C. Equipment

Transmitter	RCA, Type TT-25CL	25 kw
Transmission line	RCA, Type MI-27791, 3-1/8"	450 ft
Tower	Guyed	400 ft
Antenna	RCA, Type TF-4BM	4 bay

D. Height

Height of tower above site	400 ft
Height of antenna above tower	59 ft
Overall height above site	459 ft
Height of site above mean sea level	2445 ft *
Overall height above mean sea level	2904 ft *
Height of average terrain above mean sea level	1092 ft *
Height of site above average terrain	1353 ft *
Effective height of antenna above site	428 ft
Effective height of antenna above average terrain	1781 ft *
Effective height of antenna above mean sea level	2873 ft *

E. Power

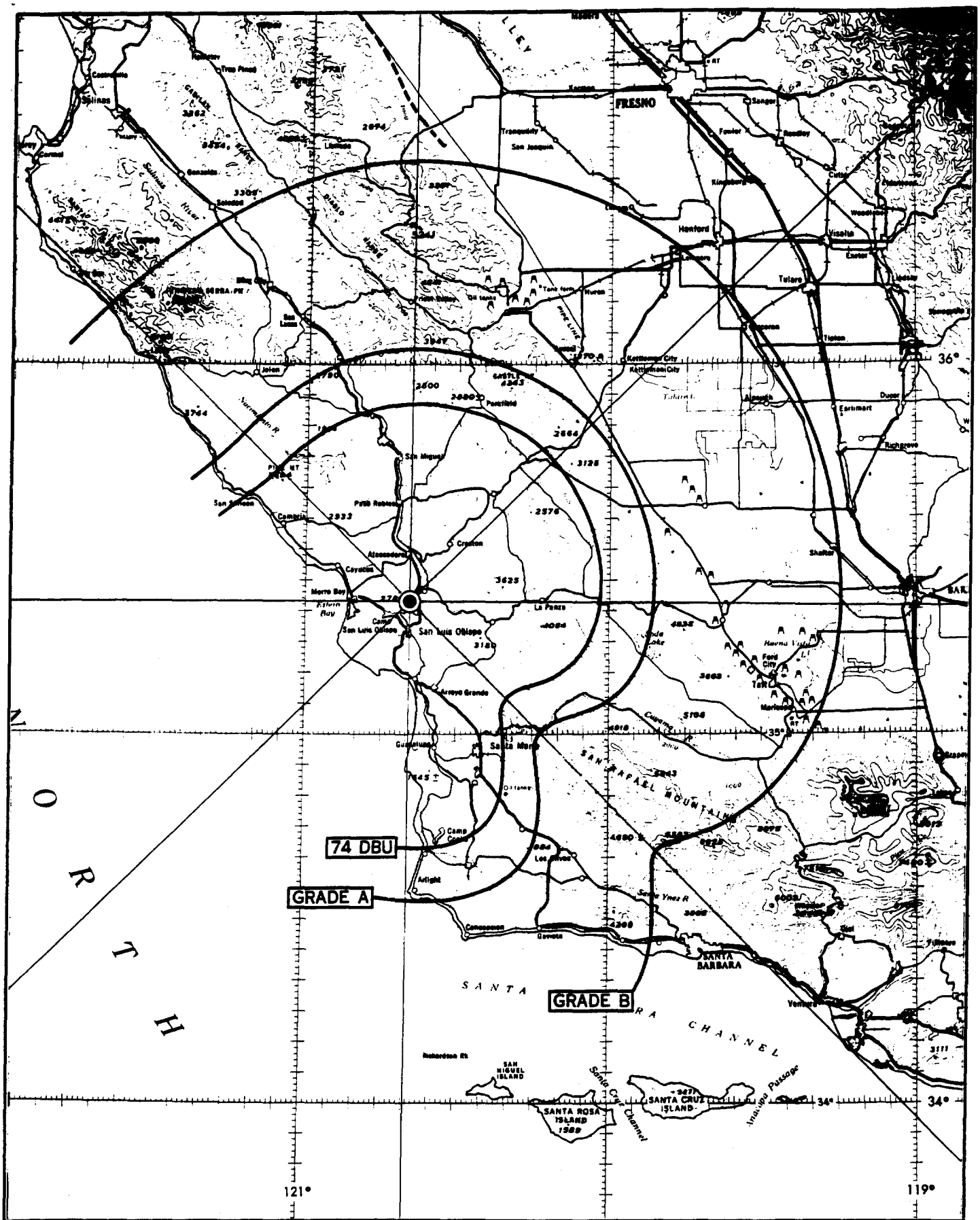
	Aural	Visual
Transmitter output	(3.0 kw) 4.77 dbk	(25 kw) 13.97 dbk
Transmission line loss	0.40 db	0.40 db
Antenna gain	6.43 db	6.43 db
Effective radiated power	(12.0 kw) 10.8 dbk	(100 kw) 20.0 dbk
Frequency	87.76 MHz	83.26 MHz
Channel	6+	6+

* Correction of data on file

STATION KSBY-TV

TERRAIN AND COVERAGE DATA

Radial	Average Elevation 2 to 10 Miles	Antenna Height Above Average Terrain	Effective Radiated Power	Distance to Contours		
				74 dbu	Grade A	Grade B
N 0° E	1201 ft	1672 ft	20 dbk	36.9 mi	46.8 mi	81.8 mi
45°	1231	1642	20	36.5	46.4	81.3
90°	1395	1478	20	34.7	44.6	78.7
135°	2071	802	20	25.0	33.5	65.0
180°	366	2507	20	45.7	55.3	93.8
225°	526	2347	20	44.0	53.8	91.5
270°	544	2329	20	43.8	53.7	91.3
315°	1402	1471	20	34.5	44.5	78.6
Specified	On file for KSBY-FM	Engineering Specifications		FCC Propagation Curves		



20 0 MILES 20 40

EXISTING COVERAGE

HAMMETT & EDISON CONSULTING ENGINEERS SAN FRANCISCO	STATION KSBY-TV CHANNEL 6 SAN LUIS OBISPO. CALIFORNIA	681104	FIGURE 3

KSBY-TV 6

KSBY, Inc.
467 Hill Street
San Luis Obispo, CA 93401
805 541 6666

James Brodsky
Director of Technical Operations

May 31, 1989

Mr. Frank R. Lanzone, Jr.
KCBX, Inc.
4100 Vachell Lane
San Luis Obispo, CA 93401

Dear Mr. Lanzone:

This will respond to your request for a letter from Station KSBY-TV concurring with the addition by KCBX, Inc., of a non-commercial educational Class B FM station on Channel 207 at Cuesta Peak. This letter is written for the purpose of satisfying the Federal Communications Commission in connection with Section 73.525 of the Rules concerning potential interference created by educational FM stations to the coverage area of Channel 6 TV stations. It should be understood that our concurrence is conditional upon the following:

1. We concur only with the specific facilities specified in your application to the Federal Communications Commission, that is to say, an effective radiated power of 5.3 kilowatts circularly polarized and combined on the same antenna that FM Station KCBX currently has installed on the KSBY-TV tower.

2. Any future modifications which require a construction permit from the FCC will require a new letter from us.

3. KSBY-TV shall be notified two days in advance of the start of Equipment Tests.

4. KCBX, Inc., will arrange for an independent engineering firm acceptable to KSBY-TV to perform a field survey upon completion of the proposed construction to verify compliance with ANSI C95.1-1982 Standard for Human Exposure to radiofrequency electromagnetic fields and will institute any safety measures found necessary to achieve compliance for public exposure.

5. Programming shall not be broadcast over the new station until all reasonable complaints of interference to Channel 6 or to other site users which are triggered as a result of the equipment tests have been resolved to the satisfaction of KSBY-TV.

6. KCBX, Inc., agrees to cooperate in resolving any Channel 6 interference complaints, or complaints of interference to other site users, which occur after the commencement of regular programming from the new antenna. This includes reasonable requests for on-off tests if such tests should be deemed necessary by KSBY-TV.

7. It is understood that KCBX, Inc., will comply with all pertinent FCC Rules regarding the alleviation of any interference which may be caused by its new facilities.

Sincerely,